

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023266**Date Inspected:** 06-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the Self-Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TA YARD, OBG 12CE (NWIT # 09044)

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows.

SEG3003B-151, 152

SEG3003C-136, 137

This Quality Assurance (QA) Inspector observed the following work in progress:

TA YARD

OBG Seg 14W:

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG3020AH-004 [Side Panel (SP) 3144B to

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Edge Panel (EP) 3029A, Complete Joint Penetration (CJP) weld at panel point (PP) 127 to PP 128]. The welder is identified as 067949 and was observed welding in 2G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-T2232-ESAB. See attached photograph for further details.

The Shielded Metal Arc Welding (SMAW) process on weld joint no: SEG3020AX-007 and 012 [I-rib stiffener on SP 3131A to Floor Beam (FB) 3315B, CJP weld at PP125]. The welder is identified as 045246 and was observed welding in 3G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020AX-017, 022 and 027 [I-rib stiffener on SP 3131A to FB 3315A, CJP weld at PP125]. The welder is identified as 045246 and was observed welding in 3G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020R-167 [WT stiffener on top anchorage plate (AP) 3022A to FB 3321A, CJP weld at PP126]. The welder is identified as 067572 and was observed welding in 4G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

The SMAW process on weld joint no: SEG3020R-191 [I-rib stiffener on top AP 3020A to FB 3321A, CJP weld at PP126]. The welder is identified as 066479 and was observed welding in 3G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

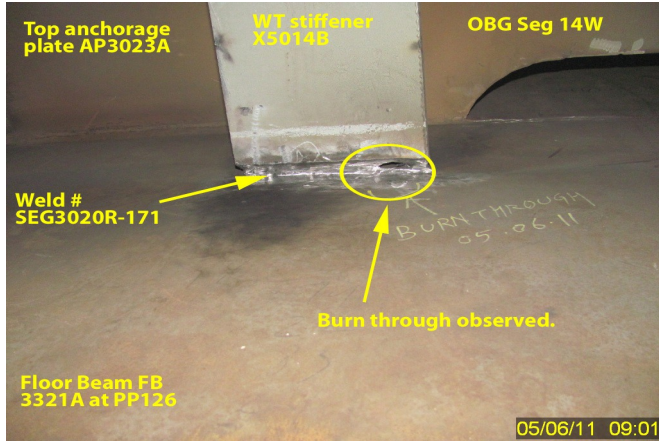
The SMAW process on weld joint no: SEG3020T-094 [I-rib stiffener on top AP 3020A to FB 3319A, CJP weld at PP125.5]. The welder is identified as 066479 and was observed welding in 3G position. ZPMC QC was identified as Mr. An Qing Xiang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2213-Tc-U4b-FCM-1.

During random in process inspection this QA inspector observed the burn through on the back gouged area of weld SEG3020R-171 [Joining WT stiffener X5014B on top AP 3023A to FB 3321A at PP126]. This issue has been discussed with ZPMC CWI Mr. An Qing Xiang and ZPMC agreed to do the repair as per contract document and approved repair procedure. See attached photograph for further details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang : 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Umesh

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer